

Annual Report to the Legislature and the California Integrated Waste Management Board

Senate Bill 876

Waste and Used Tires

Purpose

This report was prepared in accordance with Section 20 of Chapter 838, Statutes of 1999, (SB 876, Escutia), which amends and adds numerous sections to the Public Resources Code including Section 42889.3, which states:

On or before January 1 of each year, the Department of Transportation shall report to the Legislature and the board on the use of waste tires in transportation and civil engineering projects during the previous five years, including, but not limited to, the approximate number of tires used every year, and the types and location of these projects.

Background

The State of California generated approximately 33 million waste tires last year. In addition, nearly 2 million waste tires were imported into the State. Of these tires, roughly 25 million were diverted from landfills. Without significant expansion of the existing markets for waste tire usage such as rubberized asphalt concrete, playground mats or other surfacing, civil engineering applications and tire derived fuels, the tire stockpile (both legal and illegal) and the environmental issues they pose will continue to grow.

Department's Efforts

The California Department of Transportation (Department), in an effort to be a good steward of our resources and environment, has established a variety of uses for recycled content tire products and civil engineering applications in our transportation projects. One of these efforts is the use of Rubberized Asphalt Concrete (RAC) on many of our projects, see Appendix 1. RAC is different than conventional asphalt concrete in that it incorporates the use of crumb rubber from waste tires in the process.

Use of tires as a fuel supplement in cement kilns and cogeneration facilities constitutes a large market for waste tires, both nationally and in California. For example, of the 33 million waste tires generated in 2001, approximately 4.2

million were used as Tire Derived Fuel (TDF) in various cement kilns in California. These kilns produce cement, which is used to manufacture concrete that the Department incorporates into many of our construction projects. The Department uses an average of 378,000 tons of cement in highway projects each year. Of the estimated 13 million tons of cement that will be produced in California this year, the Department's share is approximately three percent of the total market.

Waste Tires Used in Department of Transportation Projects				
Year	Number of Tires Used in RAC Projects¹	Number of Tires Used as Lightweight Fill⁴	Number of Tire Used as TDF³	Totals
1998	621,284		90,000	711,284
1999	777,389		123,000	900,389
2000	2,698,778		126,000	2,824,778
2001	1,178,953	660,000 ⁴	126,000	1,964,953
2002	500,000 ²	58,000 ⁵	126,000	684,000
Subtotal	5,776,404	718,000	591,000	7,085,404

¹ Based on projects listed in Appendix 1.

² Actual quantity through the third quarter is 410,968 tires with an estimated amount of 500,000 tires projected through the end of the calendar year.

³ Based on the Board's "California Waste Tire Generation, Diversion, and Disposal, 1990 – 2001" summary, which states the total number of tires used as TDF in cement kilns in California as follows: 1998 - 3.0 million tires; 1999 – 4.1 million tires; 2000 - 2002 (projected) - 4.2 million tires each year. These values were then multiplied by the Department's 3% share of the market to determine the number of tires used as TDF.

⁴ This amount represents one project, which utilizes a new and innovative use of tire shreds as lightweight fill. If this project continues to show that this is a good engineering use of tires, then this experimental application can be adopted as a standard tool. Additional pilot projects are being aggressively pursued.

⁵ Similar to footnote 4, this is another experimental use of tires as lightweight fill behind a retaining wall.

The Department has also worked in partnership with the California Integrated Waste Management Board (Board) on projects that promote the innovative use of shredded waste tires in highway construction. In 2001, the Department constructed an embankment made of lightweight fill from shredded waste tires on the Dixon Landing Project in Santa Clara County. This year, the Department is anticipating the installation of tire shreds as lightweight backfill material behind a retaining wall on Route 91 in Riverside County. Here, the Department will test a section of tire shred installation to measure the potential reduced lateral pressure on the retaining wall. Reductions in pressure on the retaining wall related to the use of tire shreds may allow for a significant reduction in the retaining wall mass

in future designs, potentially reducing retaining wall costs. The retaining wall test section will be 260 feet in length and will utilize approximately 58,000 shredded tires.

Notice is directed to the values listed in the table for the year 2000 and subsequent years. This increased use of RAC is a result of the increased allocation of funds by the California Transportation Commission to the Department to expedite much needed roadway rehabilitation work. This additional work consisted of all types of pavement rehabilitation including but not limited to the placement of concrete pavement, conventional asphalt concrete pavement and RAC.

Subsequent years saw a decrease in funding of pavement rehabilitation projects for both RAC and conventional asphalt concrete as shown in Appendix 2. A very slight increase in concrete pavement usage occurred in 2002 due to the increased need for rehabilitation of urban pavements, which typically utilize concrete pavement.

Summary

The Department continues to help reduce the number of waste tires entering California's landfills. The Department has promoted the use of rubberized asphalt concrete as roadway pavement and is continually looking for innovative uses of recycled waste tires for our transportation projects.

The Department's use of RAC is largely dependent upon the available funding in the State Highway Operational Protection Plan (SHOPP) for pavement projects. Although the current availability of funding will reduce the number of RAC projects that will be constructed this year as well as in future years, the Department will continue to optimize the use of RAC as much as practicable.

It should be noted that there has been a substantial increase in the investment of State and Federal funds on local roads. The combined funding from the local share of the State Transportation Improvement Program (STIP), congestion relief programs, and gas tax revenue amount to over \$2 billion annually for local rehabilitation projects. Although the Department has no way to accurately identify the use of RAC on local roads, it is a likely candidate for pavement rehabilitation.

The Department is dedicated to the stewardship of our natural resources and will continue to look for opportunities for innovative uses of recycled products in our transportation projects.

Appendix 1

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION	TONNES	TIRES
040C004	04-Son-101-5.9/113.0	1/6/1998	RUBBERIZED ASPHALT CONCRETE	12,800	23,680
040C22U4	04-Son-101-0.0/20.4	5/27/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	55,000	101,750
06385204	06-Ker-178-R2.7/R9.1	8/18/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	32,900	60,865
06380904	06-Tui,Fre-99,201,245-Var	2/10/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	2,600	4,810
07118944	07-Ven-126-7.5/8.7	7/23/1998	RUBBERIZED ASPHALT CONCRETE (TYPE D)	1,280	2,368
10296614	10-Su-120-27.4/34.1	8/4/1998	RUBBERIZED ASPHALT CONCRETE (TYPE D)	1,190	2,202
10320904	10-Su-12-37.3/44.4	2/18/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	12,500	23,125
10426014	10-Su-4-26-25.6/315.0,0/1.8	4/7/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	18,300	33,855
11067604	11-Imp-78-34.1/43.9	3/19/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	8,860	16,391
112030U4	11-Imp-86-9.2/L13.7	5/21/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	11,300	20,905
11225404	11-SD-15-R4.5/R5.6	3/26/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	450	833
112146U4	11-SD-163-3.6/6.0	7/30/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	140	259
11208104	11-SD-274-0-3.9-0	9/10/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	29,600	54,760
11060404	11-SD-52-21.4/21.9	4/6/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	110	204
11059104	11-SD-5-R76.2/R78.2	2/5/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	2,990	5,532
11231904	11-SD-78-0-0/9.2	6/4/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	13,800	25,530
11225104	11-SD-78-9.5/R25.6	4/2/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,150	7,678
11232104	11-SD-78-9.5/R26.8	7/16/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	5,510	10,194
11187834	11-SD-78-39.1/R43.1	7/16/1998	RUBBERIZED ASPHALT CONCRETE	5,625	10,406
11224604	11-SD-8,805-13.5,6,0/26.4	4/23/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	550	1,018
11222904	11-SD-94-39.6/62.8	3/5/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	14,500	26,825
11066404	11-SD-94-716.3/R21.4	1/19/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,170	2,165
120429U4	12-Ora-1-0/4/0.7,18.4/20.0	12/17/1998	RUBBER MODIFIED ASPHALT CONCRETE (TYPE G)	7,440	13,764
120646U4	12-Ora-1-11.8/15.8	10/1/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,800	8,880
12087204	12-Ora-133-0.5/15.3	9/17/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	10,500	19,425
12087204	12-Ora-133-0.5/15.3	9/17/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	15,900	29,415
12030114	12-Ora-1-48.1/54.2	2/5/1998	RUBBER MODIFIED ASPHALT CONCRETE-GAP GRADED	20,000	37,000
12091604	12-Ora-405-18.4/27.2	9/3/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	17,000	31,450
12030404	12-Ora-55-0.5/1.4	7/2/1998	RUBBERIZED ASPHALT CONCRETE (TYPE D)	7,094	13,124
12031704	12-Ora-74-0.0/0.39	12/17/1998	RUBBERIZED ASPHALT CONCRETE (TYPE D)	1,400	2,590
12087504	12-Ora-74-0.4/3.2	5/7/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	5,570	10,305
120883504	12-Ora-74-4/226.7	6/11/1998	RUBBERIZED ASPHALT CONCRETE (TYPE G)	10,800	19,980
			TOTAL	335,829	621,284
041R3404	04-Nap-128-8.2/11.8	4/28/1999	RUBBERIZED ASPHALT CONCRETE (TYPE O)	1,400	2,590
04173744	04-Son-116-56.5, 58.6/63.2	11/16/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	6,560	12,136
06427604	06-Ker-14, 58-Var	4/21/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,220	7,807
06421104	06-Ker-14-0.0/24.0	8/17/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	16,000	29,600
06422104	06-Ker-155-R0.0/R17.7	8/17/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	13,300	24,605
06413104	06-Tui,Fre-201,168,198-Var	2/17/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	13,900	25,715
06411404	06-Tui,Mad-43,41-0.0/15.3,57.2/61.0	5/12/1999	RUBBERIZED ASPHALT CONCRETE (TYPE O)	3,230	5,976

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION	TONNES	TIRES
06401504	06-Tul-65-8-3/22.5			24,800	45,880
07142404	07-LA,Ora-22-0-0/2.4, 0.0/0.5	7/14/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	8,150	15,078
101A4614	10-Mer-140-60/2/80.9	2/4/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	29,600	54,760
101A0904	10-Mpa-49-0.5/29.8	6/9/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	22,300	41,255
101A4504	10-SJ,Sta,Cal-4-Var	4/20/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	45,200	83,620
10279604	10-SJ-26-1.8/24.0;24.6/33.0	7/28/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	41,000	75,850
101A4404	10-Sta,SJ-99-Var	9/21/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	33,500	61,975
10401704	10-Sta-120-18.0/T29.3	6/22/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	17,100	31,635
11228304	11-Imp-115-15.4/34.1	11/16/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	25,400	46,990
11400904	11-Imp-78-0.0/21.2	7/29/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	33,020	61,087
11176504	11-SD-209-10.6/12.4	3/11/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	3,620	6,697
112215U4	11-SD-5,163-R26.1/R27.2,1.1/1.5,1.5/2.1	4/22/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	2,230	4,126
11228604	11-SD-5-KP R80.6/R87.5	6/17/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	950	1,758
11211714	11-SD-5-R1.9/R10.1	4/22/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,350	2,498
11211724	11-SD-5-R17.4/R22.7	4/22/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	900	1,665
11217004	11-SD-75-28.0/30.5	5/20/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	5,250	9,713
11221404	11-SD-75-30.4/31.7	4/8/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	3,910	7,234
112151U4	11-SD-78-44.4/93.5	2/4/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	44,800	82,880
11229604	11-SD-78-N28.5/T31.2	1/29/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	7,600	14,060
11173504	11-SD-8-13.4/13.8, 15.6	4/22/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,060	1,961
12066914	12-Ora-1-15.8,18.4	8/26/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G-MB)	9,860	18,241
			TOTAL	420,210	777,389

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION	TONNES	TIRES
02372304	02-Sha-299-96.6/112.7	9/6/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	27,195	14,700
02359804	02-Sha-44-R0.0/R12.1	11/21/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	38,200	70,670
02367404	02-Sha-5-R37.0/R45.4	11/8/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	46,800	86,580
030A5104	03-Gle-45-27.7/37.3	4/4/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	3,640	6,734
030A7814	03-Sac-99-28.3/34.7	10/17/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	13,900	25,715
040C3804	04-Ala-13-6.9/15.4	7/25/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	25,100	46,435
040C3904	04-Ala-61-R24.1/28.9	8/2/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	15,000	27,750
040C5304	04-Ala-84-R5.2/R9.7 □	8/15/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	14,000	25,900
04045034	04-Ala-92-3.7/10.3	4/18/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	21,000	38,850
040C4204	04-CC-580-0.0/10.0	8/23/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	50,000	92,500
040C2904	04-Mrn-101-30.4/37.2	8/2/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	13,490	24,957
040C6304	04-Nap-121-10.6/15.1	8/11/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	6,500	12,025
040C4604	04-Nap-221-0.0/4.3	8/2/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	14,520	26,862
04172604	04-Sci-237-12.1/13.7	8/23/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	12,300	22,755
040C2704	04-Sol-780-1.1/11.9	9/19/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	31,600	58,460
040C2704	04-Sol-780-1.1/11.9	9/19/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	1,070	1,980
040C3404	04-Son-1-0/0/13.5	8/9/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	17,300	32,005
040C4704	04-Son-12-17.7/R25.7	7/18/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,450	8,233
040C4804	04-Son-37-0.5/3.2	8/8/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	12,024	22,244
			TOTAL	420,210	777,389

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION	TONNES	TIRES
050C5704	05-SCR,SBt-129-L0.0/16.1.0/R4.2	9/6/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	2,000	3,700
05-SLO-229-0.0/14.8	05-SLO-229-0.0/14.8	8/23/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	8,400	15,540
06-Fre-180-58.9/68.4	06-Fre-180-58.9/68.4	6/6/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	15,400	28,490
06343294	06-Fre-5-0/080.4	4/19/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	5,000	9,250
06425104	06-Fre-5-0/080.4	4/19/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O-HB)	52,700	97,495
06425104	06-Ker-99-71.6/78.4	8/15/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	15,300	28,305
06420704	06-Kin,Tul-198-R28.8/45.5, 0.0/4.8	8/15/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	40,100	74,185
06420804	06-Tul,Kin-43-15.3/36.5,0.0/2.1	10/24/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	33,800	62,530
06444604	06-Tul-99-0.0/40.2	11/1/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O-HB)	41,900	77,515
06444604	06-Tul-99-0.0/40.2	11/1/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	1,900	3,515
07176304	07-LA-1-0.2/10.9	6/29/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	40,200	74,370
07201104	07-LA-101-S0.0/43.8	11/2/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	94,400	174,640
07186304	07-LA-110-1.1/13.8	11/30/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,620	8,547
07199804	07-LA-1-18.7/35.3	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	55,200	102,120
07184404	07-LA-213-5.5/11.3	9/14/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	13,700	25,345
07199004	07-LA-47,103,103U-Var	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	3,550	6,568
07209004	07-LA-5,14-R72.3/R73.3,R39.9R50.2	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	8,000	14,800
07203304	07-LA-5-37.9/46.2	9/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	41,500	76,775
07142904	07-LA-5-R99.3/R100.7	11/16/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,690	3,127
07182904	07-LA-66-4.1/8.6	3/9/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	18,300	33,855
071384U4	07-LA-710-10.7/15.5	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	9,500	17,575
071384U4	07-LA-710-10.7/15.5	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	110	204
074E5204	07-Ven-101-6.3/37.2	6/8/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	8,060	14,911
07202804	07-Ven-118-R38.2/R52.5	9/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	37,700	69,745
074G2504	07-Ven-126,150-19.2/19.6,54.9/55.4	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	2,040	3,774
07115344	07-Ven-34-6.9/10.1	4/20/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	3,270	6,050
08484404	08-Riv,SBd-62-11.1/14.9, 0.0/1.3	8/31/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	10,500	19,425
08496404	08-Riv-15-53.5/61.5	9/28/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	13,800	25,530
08495104	08-SBd-40-R4.8/R24.1&R117.5/R143.2	9/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O-HB)	34,100	63,085
08495004	08-SBd-58-0/8.5	8/3/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	4,080	7,548
09302804	09-Mno-395-122.2/R135.7,171.1/173.8	6/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O-HB)	8,000	14,800
102279104	10-Ama-49-2.1/4.5	7/18/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,010	7,419
101A4704	10-Cal-49-R33.0/49.6	5/17/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	14,600	27,010
10484904	10-Mer-33-R26.0/R27.3	8/22/2000	RUBBERIZED ASPHALT CONCRETE (TYPE D)	1,740	3,219
100E2804	10-SJ-99-30.6/35.1	4/12/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	7,900	14,615
100A9004	10-Sta-132-27.0/45.1	4/11/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	27,000	49,950
100A7204	10-Tuo-49-29.9/36.7	3/21/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	5,500	10,175
11217804	11-Imp-111-R11.6/T13.0	9/21/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	8,400	15,540
11229404	11-Imp-115-34.1/56.6	8/24/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	33,000	61,050
11072704	11-Imp-78, 86, 111-21-2-34.0, 33-2-34.2, □35.6-36.1	10/5/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	35,105	64,944
11228404	11-Imp-86-R0.0/R9.2	8/10/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	10,400	19,240
11237204	11-Imp-8-R16.2/R66.0	9/14/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	175,000	323,750
11076504	11-SD- 8-0.8 / 1.9	4/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	3,310	6,124

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION	TONNES	TIRES
11237804	11-SD-008-R98.6/R107.8	11/30/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	38,000	70,300
11075104	11-SD-15.78-Var	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,590	2,942
11066904	11-SD-15-M43.1/R49.6	5/11/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	400	740
11236104	11-SD-209-8.5/10.6	6/22/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	8,200	15,170
11075004	11-SD-5.5,94-Var	1/13/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,500	2,775
11077104	11-SD-78-9.2/18.8	2/3/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	20,500	37,925
11072604	11-SD-94-62.6/105.2	2/24/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	39,200	72,520
11176404	11-SD-94-T27.5/R28.6	9/14/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,130	2,091
120940U4	12-Ora-1-38.2/41.7	11/16/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	13,400	24,790
120296A4	12-Ora-90-0.8/4.1, 8.1/13.0	9/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	24,500	45,325
			TOTAL	1,458,799	2,698,778
03-2a88604	03-Sac-51-13.0/14.3	8/7/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	2,310	4,274
03-4416U4	03-Sac,ED-50-19.4/37.2,0/0/1.2	1/30/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	3,180	5,883
03-4416U4	03-Sac,ED-50-19.4/37.2,0/0/1.2	1/30/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O)	42,700	78,995
04-285514	04-SCI-886-16.5/16.8		SHREDDED TIRES AS LIGHT WEIGHT FILL	660,000	
04-045024	04-Ala-92-3.7/4.3	5/23/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	320	592
04-0C7014	04-Ala-880-3.7/24.6	1/23/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	121,000	223,850
04-0C7024	04-Ala-880-24.6/44.5	1/3/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	134,000	247,900
04-010504	04-Sol-80-0.9/6.4	6/20/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	7,540	13,949
04-135994	04-SM-280-R0.0/R9.0	1/24/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O-HB)	10,300	19,055
04-177504	04-Ala-238-20.3/23.0	4/10/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O)	5,000	9,250
04-253714	04-SCI,Ala-680-M11.9/M0.0/R18.5	4/11/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	5,000	9,250
04-210104	04-Ala-84-32.8/37.3	5/22/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	3,290	6,087
05-0A4404	05-SLO-46-R0.2/R 17.4	2/27/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	31,600	58,460
05-0e7204	05-SLO-41-18.4/25.3	5/23/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O)	5,200	9,620
05-486704	05-SLO-46-R17.4/R34.9	5/9/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	18,400	34,040
06-453604	06-Kin,Fr-33,198-12.9/20.1,19.8/33.9	2/28/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	10,300	19,055
07-182804	07-Ven-126-20.9/26.8	5/17/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	19,900	36,815
07-1y0304	07-LA-5-94.7/96.2	4/19/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,610	2,979
07-1y0804	07-LA-30-F0.0/R3.8	5/24/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,840	3,404
07-1y1704	07-LA-138-25.8/33.8	8/23/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O)	1,410	2,609
07-1y1904	07-LA-170.5-R24.5/R32.8,55.6/56.2	5/10/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	6,130	11,341
07-202604	07-LA-101-43.8/51.8	1/11/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	33,160	61,346
07-207704	07-Ven-1-32.8/33.4	2/15/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	172	318
07-207804	07-LA-5-25.3/29.3	5/24/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	700	1,295
07-208204	07-LA-405-21.4/37.4	7/26/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,430	8,196
07-4f9604	07-LA-107-3.6/4.8	7/19/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	2,810	5,199
074G8904	07-LA-1-40.5/43.9	3/8/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	5,170	9,565
08-000314	08-SBD-83-10.3/15.3	1/4/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	16,000	29,600
08-0A2504	08-SBD-95-247-Var	3/8/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	23,540	43,549
08-436304	08-Riv-91-9.2-11.5	1/25/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,170	2,165

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION	TONNES	TIRES
10-0A5004	10-SJ-26-3.1/3.8	11/20/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	770	1,425
10-0a6504	10-SJ-99-28.4/28.8	10/31/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	490	907
10-0E2704	10-Su,Sta-4.99-Var	10/2/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O)	6,580	12,173
10-3404u4	10-Tuo-10s-R3.0/7.4	5/2/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	12,100	22,385
11-073404	11-SD-15-M32.3/M34.1	9/20/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,591	
11-077204	11-SD-15, 54-0.9/3.7, 4.0/8.5	5/24/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	860	
11-178504	11-SD-78-57.1/60.0	2/1/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	3,860	7,141
11-185944	11-SD-57/8-R81.8/R82.4, 0/0/1.1	8/23/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	6,550	12,118
11-237104	11-Imp-86-11.8/15.8	5/24/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	2,220	4,107
11-241114	11-SD-75/282-R31.5/F33.0 0/0/1.1	2/22/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,300	7,955
11-241124	11-SD-805,905-11.6,19.8,22.5,7.1,8.7	5/31/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,700	8,695
11-241134	11-SD-15-M34.9/75.3	10/11/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	2,680	8,714
12-0850u4	12-Ora-5,22-10.9,11.9,R1.0/R21.2	7/12/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,958	
12-095614	12-Ora-55-R12.3/20.4	6/7/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	470	870
12-095624	12-Ora-55-20.5/ 28.0	5/24/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	21,000	38,850
12-0A0004	12-Ora-1-26.2/29.6	3/29/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)	39,300	72,705
			TOTAL	8,500	15,725
				637,272	1,838,953

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION	TONNES	TIRES
03-1c8104	03-Pla,Yol,Sac-5,50,51,80-Var	5/1/2002	RUBBERIZED ASPHALT CONCRETE (TYPE O)	2,400	4,440
03-2c5704	03-Nev,Sle-80-45.2/51.1, 0/0/2.6	7/24/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)	29,100	53,835
03-3546U4	03-Sac,Pla-80,51,244-M14.6/28.9,0,0/1.1,13.7,0.2	4/9/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)	5,795	10,721
03-3546U4	03-Sac,Pla-80,51,244-M14.6/28.9,0,0/1.1,13.7,0.2	4/9/2002	RUBBERIZED ASPHALT CONCRETE (TYPE O)	16,400	30,340
06-465104	06-Tui-65-35.2/47.6	2/26/2002	RUBBERIZED ASPHALT CONCRETE (TYPE O-HB) (WARRANTY)	12,200	22,570
07-105484	07-Ven-150-24.4/38.6	5/30/2002	RUBBERIZED ASPHALT CONCRETE (WARRANTY)	21,800	40,330
07-142204	07-LA-72-0/0/11.0	6/13/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)	21,600	39,960
07-181604	07-LA-91-R22.5/R33.4	8/1/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)	270	500
07-189704	07-LA-170-16.2/17.4	1/10/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,830	3,386
07-1y2904	07-LA-110-32.2/35.6	6/6/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)	70	130
07-4h4304	07-LA-10S-40.0/41.0	3/21/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,100	2,035
08-1A6104	08-Riv-10-R215.7/R231.9	8/22/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G-ASPHALT RUBBE)	35,300	65,305
08-334834	08-RIV-60, 91-18.9/19.2, R32.7/R34.8	9/12/2002	SHREDDED TIRES	58,000	
08-428164	08-Riv-86/11/195-3.8/27.8,29.6/40.2,0/3/10.6	7/25/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)	41,400	76,590
10-096504	10-Mer-33,140-R.0/R9.0;0.3/18.9	4/23/2002	RUBBERIZED ASPHALT CONCRETE (TYPE O)	2,260	4,181
10-0h7304	10-Ama,Mer-49, 99-23.7/28.3, 0/0/3.9	3/26/2002	RUBBERIZED ASPHALT CONCRETE (TYPE O)	5,200	9,620
12-029824	12-Ora-405-18.2/27.4	2/21/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)	6,920	12,802
12-094104	12-Ora-57-18.1/36.3	2/21/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)	18,500	34,225
			TOTAL	222,145	468,968

Pavement Trends 1997-2002

